

L 17953-66

ACC NR: AF6010007

SOURCE CODE: BU/0012/65/008/002/0121/0135

AUTHOR: Matev, Vasil

29
B

ORG: none

TITLE: Possible uses of teaching machines

SOURCE: Fiziko-matematicheskoe spisanie, v. 8, no. 2, 1965, 121-135

TOPIC TAGS: teaching machine, computer

ABSTRACT: This comprehensive survey was written on the basis of the author's experiences during the visit to two expositions of teaching machines organized in Paris in 1964 by UNESCO and the National Pedagogic Institute, data from pamphlets by Soviet, US, and French authors, and other numerous references. It covers 1) the possible uses of teaching machines, 2) the actual uses of teaching machines in advanced countries of the world, and 3) the various types of teaching machines (from simple cardboard-made programmed learning units to complicated computerized electronic units). Orig. art. has: 20 figures. [JPBS]

SUB CODE: 09 / SUEN DATE: none / OTH REF: 011 / SOV REF: 039

Card 1/1 vmt

BULGARIA

KARABASCHEFF, N., METEV, V., KUTOV, T., Department of Physics, Medical Institute, Sofia; Scientific Institute for Pedagogy, Sofia

"The Influence of Ultrasound Waves on the Germination of Maize"

Sofia, Doklady Bolgarskoy Akademii Nauk, Vol 19, No 4, 1966, pp 305-308

Abstract: [German article] Since in the past the maize ultrasound germination studies yielded contradictory results, the authors carried out new such experiments in 1964 covering the period of germination up to the 11 th day of development. The frequency was 800 Kc with an approximately uniform optimum radiation intensity of 1.5 W/cm². Results show that 1) optimally chosen radiation intensities hasten germination and the beginning stages of growth; 2) the same positive effect was observed with both the "VIR 42" and "Ohio 0 92" hybrid species. The experiments are presently extended to the entire development state of the plant. There are 6 Soviet-block and 1 Western reference. (Manuscript received, 20 Dec 65.)

METEVA, Ia.; VASILEVA, T.; ROMANOV, M.; RALCHEVA, A.; MILOSHEVA, E.

Epidemic of serous meningitis and similar disease. Suvrem.
med., Sofia 6 no.11:46-51 1955.

1. Iz I detska gradska bolnitsa, Sofia. nauchen rukovoditel:
prof. Br. Ts. Bratanov.

(MENINGITIS, epidemiology,
serous, epidemic outbreak in Bulgaria. (Bul))

METEVSOSYAN P.A. (IMASH) GANULICH A.K. (VVIA)

Experimental work on mechanical electronic systems

paper read at the Session of the Acad. Sci. USSR, on Scientific Problems of
Automatic Production, 15-20 October 1956
Avtomatika i telemekhanika, No. 2 p. 182-192, 1957

9015229

MEPEYUNAS, A.

Marble wood. Vokrug sveta no.9:17 S'55. (MLRA 8:12)
(Birch)

METIANU, I., ing.; SACHELARESCU V., ing.

Applying electrosharpening of cutting tools plated with metallic carbide in the wood industry. Ind lemnului 16 no.1:2-14. Ja '65

1. Forest Research Institute, Bucharest.

MEYER, Stefan (Poznan, Polna 33)

Morphological role of the placenta in serological conflict. *Gin. polska* 25 no.3:265-271 July-Sept. 54.

1. Z Kliniki Położnictwa i Chorob Kobięcych Akademii Medycznej w Poznaniu. Kierownik: prof. dr I. Roszkowski.

(En FACTORS,

isoimmun. in regn., placenta in)

(PLACENTA, in various diseases,

En isoimmun.)

(PREGNANCY, blood in,

En isoimmun., placenta in)

PIKEL'NER, S.B.; METIK, L.P.

Anisotropy of velocities of interstellar gas clouds. Izv.
Krym.astrofiz.obser. 18:198-201 '58. (MIRA 13:4)
(Gases, Interstellar)

22090

S/035/61/000/003/017/048
A001/A101

3,1560

AUTHOR: Metik, L.P.

TITLE: Spectral classes, photographic magnitudes and color indices of 3,404 stars in constellation Cygnus (center at $\alpha_{1950} = 20^h 44^m$, $\delta_{1950} = +45^{\circ} 0'$)

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 3, 1961, 38, abstract 3A347 ("Izv. Krymsk. astrofiz. observ.", 1960, v. 23, 60 -112, Engl. summary)

TEXT: Spectrograms were taken with a 16" astrograph with an objective prism making exposures of about two hours. Each star was classified from at least three spectrograms. The author presents diagrams of comparing the spectral classes obtained with the following catalogues: HD, Stockholm, Bergedorf catalogue and, for early classes, with the MK. Photographic magnitudes and red magnitudes were determined from photographs taken with a "Dogmar" camera. The relationship between the system obtained of m_{ph}^{Cr} and the systems of Stockholm m_{ph}^{St} and B is expressed by the formulae:

$$m_{pg}^{Kp} - m_{pg}^{St} = (0.07 \pm 0.03) - (0.06 C \pm 0.03).$$

$$B - m_{pg}^{Kp} = (0.07 \pm 0.03) - (0.06 C \pm 0.03).$$

Card 1/2

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S/035/61/000/003/017/048
A001/A101

Spectral classes, ...

For the red magnitudes by the formulae:

$$m_{pg}^{st} - m_r^{st} = (0,01 \pm 0,01) + (0,187 C \pm 0,02).$$

$$v - m_r^{st} = (-0,01 \pm 0,02) + (0,22 C \pm 0,02).$$

Here $C = m_{pg}^{Cr} - m_r^{Cr}$, which is related to color indices of the Stockholm catalogue (CI) and B-V by the following expressions:

$$CI = (0,03 \pm 0,02) + (0,78 C \pm 0,03).$$

$$B-V = (0,192 \pm 0,02) + (0,716 C \pm 0,02).$$

The author presents the catalogue of 3,404 stars divided into 6 zones by declinations $42^\circ, 43^\circ, \dots, 47^\circ$, which contains the ordinal number in the zone by increasing α , number according to ED, m_{pg} , $C = m_{pg} - m_r$, and spectral class. To identify the stars of the catalogue, maps are given whose coordinate network pertains to 1950 and is applied according to data of catalogue AOK2. There are 13 references.

T. Agekyan

[Abstracter's note: Complete translation]

Card 2/2

GERSHBERG, R.Ye.; METIK, L.P.

Densities and masses of diffuse nebulae. Izv.Krym.astrofiz.obser.
24:148-159 '60. (MIRA 13:12)
(Nebulae)

METIK, L.P.

Seven new variables in Aquila and in SA 87. Astron. tsir. no. 215:18
0 '60. (MIRA 14:3)

1. Krymskaya astrofizicheskaya observatoriya AN SSSR.
(Stars, Variable)

METIK, L.P.

Seven new variable stars in the region of Aquila and S A 37.
Per. zvezdy 13 no.5:364-366 Je '61. (MIRA 15:8)

1. Krymskaya astrofizicheskaya observatoriya AN SSSR.
(Stars, Variable)

L 8620-65 EWT(1)/EWG(v)/EEC(t) Pe-5/Pae-2 AFETR/SSD/AFWL/ESD(t) GW

ACCESSION NR: AR4038678

8/0269/64/000/003/0036/0038

SOURCE: Ref. zh. Astron. Otd. vyep., Abs. 3.51.307

AUTHOR: Metik, L. P.; Prokik, V. I.

TITLE: Determination of distances to planetary nebulae on the basis of interstellar absorption

CITED SOURCE: Izv. Krymsk. astrofis. observ., v. 30, 1963, 113-117

TOPIC TAGS: planetary nebula, interstellar absorption, astronomy

TRANSLATION: A method is proposed for determination of the distances to planetary nebulae as a function of interstellar absorption on distance in the neighborhood of a nebula; the dependence was obtained using faint stars. The distance to a nebula is estimated from the absorption determined from its spectrum. The authors give the results of application of the method for 16 nebulae and cite the distances determined by other authors. Bibliography of 21 items. I. P.

DATE ACQ: 17Apr64

SUB CODE: AA

ENCL: 00

Card 1/1

L 15716-65 EWT(1)/EWG(v)/EEC(t) Pe-5/Pae-2 AFFTC/ESD-3/ESD(t)/SSD/BSI/SSD(b)/
AFWL/ASD(3)-5/APMD(t)/AFETR CW S/0269/64/000/008/0026/0027
ACCESSION NR: AR4049317

AUTHOR: Metik, L.P., Gershberg, R. Ye.

TITLE: Absolute photometry of some planetary nebulae in the H alpha regions

SOURCE: Ref. zh. Astronomiya. Otdel'ny'y vy*p., Abs. 8. (1). 208

CITED SOURCE: Izv. Kry'msk. astrofiz. observ., v. 31, 1964, 112-117

TOPIC TAGS: astrophysics, photometry, planetary nebula

TRANSLATION: A 640-mm high-power (F/1.4) camera has been used to obtain photographs of 33 planetary nebulae in the region of the H α line. As a result of photometric analysis of the negatives it was possible to determine the of the nebulae in absolute units and also the distances to these objects. The results are given in a table listing: mean surface brightnesses I_{cr} in ergs/cm².sec.sterad, the solid angles σ in seconds, luminosities P_{cr} in ergs/cm².sec, distances in parsecs and mean electron densities in cm⁻³. There is a brief discussion of the problem of the mean masses of planetary nebulae. Bibliography of 15 items. Authors' summary.

Card 1/2

L-15716-65

ACCESSION NR: AR4049317

SUB CODE: AA

ENCL: 00

0

Card

2/2

METIK, P.P.

Machine for removing bricks of ice cream. Khol. tekhn. 38
no.6:48-49 N-L '61. (MIRA 15:1)
(Ice cream industry--Equipment and supplies)

24 2100
34.7700

S/185/62/007/001/000e/015
D299/0301

AUTHORS: Shmayevs'kyy, V.Ye. and Metili, T.P.
TITLES: Thermoelectric and electrical properties of the section ZnSb - CdSb
PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 3, 1962
274 - 276

TEXT: The electrical conductivity σ and the differential thermo-e.m.f. α of the specimens were measured in a temperature interval from room temperature to 150°C. The specimens were prepared from the following original materials: Sb;Cd with Zn, Pb, Fe, Cu and Ni - impurities; Zn with various impurities. The specimens were melted in pyrex containers; for better mixing of the melt, an electromagnetic vibrator was used and the furnace was moved with respect to its horizontal axis. The conductivity was measured by the two-probe method by means of a compensation circuit, used also for the thermo-e.m.f. measurements. Each specimen underwent 2-3 series of measurements. The results of the various series were in almost complete agreement. For all the specimens,

Card 1/2

Thermoelectric and electrical ...

S/185/62/007/003/006/015

D299/D301

... decreased with increasing temperature; α first decreased and then started to increase. The effect of the heat treatment on the properties of the specimens, is shown in graphs. From the temperature dependence of the specimens it is possible to determine the dependence of α and ρ on the concentration of the components at various temperatures. With 5 mol. % CdSb, ordering of the solid solution takes place at temperatures above 150°C. A comparison of the temperature-dependence curves, obtained by the authors, with those obtained by other investigators, shows that the procedure used in the present investigation yields a higher degree of ordering. This is also confirmed by the sharper extrema of the curves (as compared to those in the references). There are 4 figures, 1 table and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: K. Toman, J. Phys. and Chem. Solids, 11, no. 3-4, 342, 1959.

ASSOCIATION: L'vivs'kyi derzhuniversytet im. Ivana Franka (L'viv State University im. Ivan Franko)

SUBMITTED: August 26, 1961

Card 2/2

L 18450-66 ETC(m)-6 Wd

ACC NR: AP6002559

SOURCE CODE: UR/0286/65/000/023/0056/0056

AUTHORS: Madoyan, A. A.; Maksimova, V. I.; Metil', Zh. P.; Volodin, V. A.

ORG: none

32
B

TITLE: Device for measuring flow rate. ^{am} Class 42, No. 176709

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 56

TOPIC TAGS: flow meter, pressure measurement

ABSTRACT: This Author Certificate presents a device for measuring flow rate. The apparatus contains a detector for sampling the dynamic and the static pressure and a measuring device. To exclude the effect of dust content of the medium on the instrument reading, the detector is in the form of a nozzle placed along the current and two pneumatic tubes placed at an angle to the nozzle and concentric with each other (see Fig. 1). The inner tube for sampling the static pressure is connected to a hole in the nozzle perpendicular to the moving current. The outer tube for sampling the dynamic pressure is made with an expanded

Card 1/2

UDC: 681.121.843

2

L 18150-66

ACC NR: AP6002559

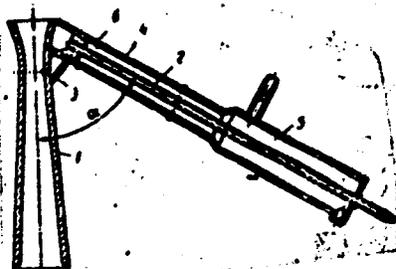


Fig. 1. 1 - nozzle; 2 - inner tube; 3 - hole for sampling static pressure; 4 - outer tube; 5 - dust collector; 6 - hole for sampling dynamic pressure.

portion for collecting dust and with a hole placed toward the current. Orig. art. has: 1 diagram.

SUB CODE: 20, 11/ SUBM DATE: 01Jul64/

Card 2/2 7195

METILJEVIC, DZ.

Economic use of coal in some of our thermoelectric industries.

p. 1619 (Technika) Vol. 12, no. 10, 1957, Belgrade, Yugoslavia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

KORNEV, I.V.; METIN, V.S.

Reducing noises in twister sections of synthetic fiber plants.
Khim.volok. no.2:44-49 '62. (MIRA 15:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tekstil'nogo i
i legkogo mashinostroyeniya.
(Textile machinery)

PACOSTE, Gh., ing.; CRIVAT, I., ing.; METINCU, Gh., ing.

Results of directional turbine drilling in Rumania. Petrol si
gaze 14 no.7:341-346 JI '63.

GORSHKOV, Vasilii Iosifovich; METIT, G.Ya., red.; SUKHAREVA, R.A.,
tekh.n.red.

[Regulating wages and establishing work norms; practice of the
Moscow Grinding Machine Plant] Uporiadochenie zarabotnoi
platy i normirovaniia truda; opyt Moskovskogo zavoda shlifo-
val'nykh stankov. Moskva, Ob-vo po rasprostraneniu politi-
cheskikh i nauchnykh znanii RSFSR, 1957. 31 p. (Peredovoi
opyt proizvodstva. Seriya "Ekonomika," vyp.2.) (MIRA 12:9)
(Moscow--Grinding machines) (Wages)

METKALEV, A. (Lt. Gen. Arty)

Author of article, "The Mighty Artillery of the Socialist State."
(Kommunist, in Azerbaijani; Moldava Sotsialiste; Sovetskaya Belorussiya;
Sovetskaya Kirgiziya; Sovetskaya Latviya; Sovetskaya Moldaviya; Zarya
Vostoka - all 22 November 1953.)

SO: Summary #145, 1 June 1954.

KOTTEL', Yu.; METKIN, A.; ANISIMOV, K.

This is what conveyers contribute. Prom.koop. 14
no.7:6-7 JI '60. (MIRA 13:8)

1. Tekhnoruk arteli "Kul'tkhis," Kiyev (for Kottel').
2. Tekhnoruk arteli invalidov "Kollektivnyy trud," g. Kimry.
Kalininskoy oblasti (for Metkin).
3. Predsedatel' pravleniya
arteli invalidov "Kartonash," Leningrad (for Anisimov).
(Kiev--Pigments) (Kimry--Shoe industry)
(Leningrad--Paper box industry)

Country : Czechoslovakia
CATEGORY : CULTIVATED PLANTS. Fruits. Berries. Nuts. Veg.

ABB. JOUR. : RZPiol., No 1, 1959, No. 1245

AUTHOR : Metzovfo, Stancko

INST.

TITLE

: Stock of the Aramon x Riparia Group

CRIT. PUB. : Socialist. Kmet., 1957, 8, No. 10, 100-106

ABSTRACT : Aramon x Riparia has already been used for a stock around sixty years in Austria and France and to a lesser degree in other European countries. Two types of the cross Aramon x Riparia are distinguished: the first -- Aramon x Riparia 1/3 A has only male flowers and does not produce fruit, the second -- Aramon x Riparia D gives small dark blue fruit. At the experimental plot of the Institute of Horticulture and Viticulture in Slovenia at Maribor there are

CARD:

1/2

MEFLA, S.A., inzhener; KOPTYAYEV, B.A., inzhener.

Wooden span construction in building logging roads and railroads.
Les.prom.14 no.4:10-11 Ap '54. (MLRA 7:4)

(Bridges, Wooden)

KLUG, Otto; METLENKO, Sandor

Use of H_2SO_4 dyes in determining the vanadium content of the alumina industry products. *Magy kem lap* 18 no.6:293-294 Je '63.

1. Femipari Kutato Intezet, Budapest.

584 D 10...

Wacław MATHA, Barbara POLAKOVA-SZCZAPKOWICZ and Jerzy SZCZEPANSKI,
First Gynecology and Obstetrics Clinic, College of Medicine (I Klinika
Ginekologiczna i Chorob Kobietyon w [wzrostu] [edyczne]) Head (Kierownik)
Docent Dr. POLAKOVA, Odessa.

Case of Acute Hemopoietic Insufficiency During Pregnancy.

Wroclaw, Przegląd Lekarski, Vol 18/Sec 2, No 11, 1962; pp 443-446.

Abstract [English summary modified]: Acute aplastic anemia in young
woman aged 21, para-3, at 32nd week of pregnancy. Planned abortion
could not be carried out because condition rapidly deteriorated despite
comprehensive medical therapy, died 18 days after admission. Three
chromoclastograms, 4 Polish and 5 Western references.

~~MEYLERKAMP, E.A.~~, dotsent, kandidat tekhnicheskikh nauk; KOVTUN, D.G., dotsent fiziko-matematicheskikh nauk; ANGELEYKO, V.I., dotsent, kandidat tekhnicheskikh nauk.

Scheduling railroad-tie replacement. Trudy KHIIT no. 24:63-80 '54.
(Railroads--Ties) (MIRA 8:1)

ANGELEYKO, V.I., doktor tekhn.nauk, prof.; METLERKAMP, Ye.A., kand.tekhn.
nauk, dotsent

Designing switch points for strength. Vest. TSHI MPS 20 no.1:
56-58 '61. (MIRA 14:1)

1. Khar'kovskiy institut inzhenerov zheleznodorozhnogo transporta
imeni S.M.Kirova.

(Railroads—Switches)

L 05824-67 ENT(m)
ACC NR: AT6031464

SOURCE CODE: UR/3158/66/000/037/0002/0012

AUTHOR: Kononov, V. N. ; Metlev, A. A. ; Shorin, V. S.

ORG: none

TITLE: Method to stabilize a scintillation spectrometer

SOURCE: Obninsk, Fiziko-energeticheskiy institut, Doklady, FEI-37, 1966. Metod stabilizatsii stsintillyatsionnogo spektrometra, 2-12

TOPIC TAGS: scintillation spectrometer, gamma quantum, thyratron, multichannel analyzer/TX-3B thyratron, A1-100-multichannel analyzer

ABSTRACT: The authors describe a numerical method for stabilizing a scintillation spectrometer according to a differential rate of calculation. The method involves the use of an A1-100-1 multi-channel analyzer. Scintillation was measured with a TX-3B thyratron at an amplitude approaching 30 Mev on a theoretical scale of gamma quantum. The noise level of the preparatory discharge of light resources did not exceed the noise of the photomultiplier for such a thyratron wiring diagram. The amplitude of the stabilized light pulse depends on that of the unstabilized light

Card 1/2

L 05824-67

ACC NR: AT6031464

pulse if the intensity coefficient changes. The authors thank V. Novikov, who participated in the above work. Orig. art. has: 7 figures.

SUB CODE: 09, 20/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 004/

kh

Card 2/2

METLIN, A., mekhanik.

Certain deficiencies in the SKR-11 conveyer. Mast.ugl. 6
no.5:21 My '57. (MIRA 10:7)

1. Shakhta No. 29 "Kapital'naya" kombinata Chelyabinskugol'.
(Conveying machinery)

METLIN, A., mekhanik.

Shovel-type spades. Mast. ugl. 6 no. 9:32 S '57. (MIRA 10:11)

1. Uchastok shakhty No. 29 "Kapital'naya" kombinata Chelyabinskugol'.
(Coal mines and mining--Equipment and supplies)

МАЛЫСЬКОВ, М.М., МЕТИН, А.Н. [deceased]

Device for fiber illumination on spinning and twisting machines.
Tekst. prom. 25 no.4:22-23 Ap '65. M. P. 1965.

1. Zamostitel' glavnogo mekhanika fabrika "Khimvolokna"
(for Malyskov). 2. Glavnyy mekhanik fabriki "Khimvolokna"
trud" (for Metlin).

MEPLIN, B. A.

Case of bullous dermatitis caused by *Heracleum pubescens*.
Sov. med. 20 no.4:79 Ap '56 (MLRA 9:8)

1. Iz Cherkasskogo oblastnogo kozhno-venerologicheskogo
dispansera.

(DERMATITIS, CONTACT, etiology and pathogenesis,
Heracleum pubescens, bullous dermatitis (Rus))

(PLANTS,
Heracleum pubescens causing dermatitis bullosa (Rus))

METLIN, B.A. (Cherkassk)

Standard pharmacological requirements in teaching clinical
disciplines. Fel'd. 1 akush. 22 no.3:49 Mr '57 (MLRA 10:5)
(PHARMACOLOGY--STUDY AND TEACHING)

METLIN, B.A.

Treatment of alopecia areata with iodine and paraffin. Sov.med.
22 no.4:131 Ap '58 (MIRA 11:7)

1. Iz Karachayevo-Cherkesskogo kozhno-venerologicheskogo dispansera
(glavnyy vrach T.L. Shestakova).

(ALOPECIA AREATA, ther.

iodine paraffin, local admin. (Rus))

(PETROLEUM PRODUCTS, ther. use

iodine paraffin in alopecia areata, local admin. (Rus))

(IODINE, ther. use.

alopecia areata, with paraffin. (Rus))

METLIN, B.A.

"Method of detaching the epidermis following epilat on in fungous diseases." Sov. med. 27 no.10:134 0 '63. (MIRA 17:6)

1. 12 Cherkasskogo oblastnogo venerologicheskogo dispensara.

METLIN, G.A.

2

Vacuum sealing of aluminum products. G. A. Metlin
and L. A. Timoshin, U.S.S.R. 106,698. July 25, 1957.
To insure vacuum tightness in articles made of aluminum,
they are sealed after firing with a mixture of MgO and BeO
in a vacuum of 0.1 mm Hg and then fired for several days at
1-200°C in vacuum of 0.1 mm Hg.

0026

Mellin, G.A.

5

137-1958-1-560

METLIN, G. A.

Translation from Referativnyy zhurnal, Metallurgiya 1958. Nr 1 p 88 (USSR)

AUTHORS Ivanov, V.P., Metlin, G.A.

TITLE: Vacuum-tight Bonding of Ceramics to Metals (Vakuumnoplotnyye spai keramicheskikh materialov s metallami)

PERIODICAL Tr. N.-i. in-ta M-vo radiotekhn. prom-sti SSSR, 1957, Nr 5 (41), pp 3-51

ABSTRACT This is a monograph on the employment of vacuum-tight bonding of ceramics to metals in high-frequency electronics and the manufacture of vacuum gauges for electrical uses. Four major types of ceramics are investigated: 1) magnesia silicates, 2) zirconium silicates, 3) aluminum silicates and aluminum oxides, and 4) wollastonite and modern high-temperature vacuum combinations thereof with metals. Existing methods of single-stage and multiple-step processes for producing bonds, including the carbide-boride method developed at the NII MRTP (Scientific Research Institute of the Ministry of the Radio-Engineering Industry) are adduced. Contemporary concepts in physical chemistry on the formation of bonds between ceramics and metals are presented. In addition to a detailed survey of data in the literature,

Card 1/2

137-1958-1-560

Vacuum-tight Bonding of Ceramics to Metals

the results of investigations performed at the NII MRTTP on these problems (by the Authors, among others) are presented

I. B.

1. Ceramics--Bonding to metals
2. Vacuum gages--Manu-
facture
3. Bonding--Ceramics to metals--Chemical analysis

Card 2/2

KUKUYEV, Ye.M.; YEFIMOV, V.F.; FLIORIN, B.S., otv.red.; VALENTINOV,
A.M., red.; ABRAMYAN, A.A., red.; KISELEV, N.A., red.; METLIN,
V.A., red.; ANDREYEV, G., tekhn.red.

[Handbook with nomenclature and prices for materials and equipment
used in the coal industry] Nomenklaturnyi spravochnik i tseny na
materialy i oborudovanie, primenyaemye v ugol'noi promyshlennosti.
Moskva. Group 2. [Nonferrous metals] TSvetnye metally. 1950.
275 p. (MIRA 13:4)

1. Russia (1923- U.S.S.R.) Ministerstvo ugol'noy promyshlennosti.
(Nonferrous metals)
(Coal mines and mining--Equipment and supplies)

1977, 1978.

310. Osnoynye svedeniya o...
Sobremennaya...
... (57.5...)

311. ...

METL... V... ..

Canopy... ..
of... ..
49 p. tabs.

45643

26.230

S/875/62/000/000/003/010
D237/0308

AUTHORS: Nikitin, Yu.M. and Metlin, V.B.

TITLE: Determination of local deflections in the walls of a ZHRD chamber with closely spaced ribs

SOURCE: Nekotoryye voprosy mekhaniki; sbornik statey, Ed. by V.I. Feodos'yev. Moscow, Oborongiz, 1962, 26-32

TEXT: Local deflections in the walls of the combustion chamber ZHRD are solved by V.I. Feodos'yev for the case when the wall thickness is much smaller than the distance between the reinforcing ribs. The authors deal with the case when both are of the same order; in addition to flexural components, sharing forces and deformations are considered. The curvature of the shell is neglected, and it is assumed that the stresses and deformations vary only in the plane of transverse cross-section. By energy considerations, the expression for the pressure drop on the wall is obtained, and integrated numerically. The results obtained were found to be in good agreement with experimental data. There are 5 figures and 7 tables.

Card 1/1

METLIN, V.F.

Carbon-adsorptive installation with horizontal adsorbers. Gas.prem.no.10:
34-35 0 '56. (Carbon) (Benzene) (MLRA 9:10)

M. I. M. I. M. I.

METLINA, N.B.

Clinical aspects of occupational neuritis in workers of the diamond industry. Gig. i san. 22 no.6:82-82 Je '57. (MIRA 10:10)

1. Iz nevrologicheskogo otdeleniya klinicheskogo sektora Instituta gigiyeny truda i professional'nykh zaholevaniy AMN SSSR.

(NEURITIS,

occup. in diamond indust. workers (Rus))

(OCCUPATIONAL DISEASES,

neuritis in diamond indust. workers (Rus))

^L
MEYMINA, N.B. (Moskva)

~~MEYMINA, N.B.~~
Clinical aspects of disorders due to vibration among riveters.
Gig.truda i prof.zab. 2 no.3:28-32 My-Je '58 (MIRA 11:5)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR.
(RIVETS AND RIVETING--HYGIENIC ASPECTS)
(VIBRATION--PHYSIOLOGICAL EFFECT)

DROGICHINA, E.A.; METLINA, N.B. (Moskva)

On the clinical picture of vibration sickness. Klin.med. 37 no.9:
104-110 S '59. (MIRA 12:12)

1. Iz Instituta gigiyeny truda i profzabolevaniy AMN SSSR (dir -
deystvitel'nyy chlen AMN SSSR prof. A.A. Letavet).
(VIBRATION effects, injurious)
(OCCUPATIONAL DISEASES)

METLINA, N.B. (Moskva)

Diagnostic significance of a study of sensitivity to vibration in
vibration disease. Gig. truda i prof. zab. 4 no.5:45-48 My '60.
(MIRA 13:9)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR.
(VIBRATION—PHYSIOLOGICAL EFFECT)
(SENSES AND SENSATION)

RYZHKOVA, M. N.; SMIRNOVA, M. I.; SADCHIKOVA, M. N.; METLINA, N. B.
(Moskva)

Use of radioactive sodium for the purpose of determining the permeability of the vessels in some forms of occupational diseases of the nervous system. Gig. truda i prof. zab. no.4:32-35 '62.
(MIRA 15:4)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR.

(SODIUM--ISOTOPES) (OCCUPATIONAL DISEASES)
(BLOOD VESSELS--PERMEABILITY)
(NERVOUS SYSTEM--DISEASES)

GILYAREVSKIY, S.A., prof.; KASPAROV, A.A., dotsent; KALINA, N.P.

Vibration disease. Trudy 1-gc MMI 28:160-170 1964

(MIRA 17:11

L 44304-66

ACC NR: AP6018225

(N)

SOURCE CODE: UR/0391/66/000/006/0006/0010

AUTHOR: Metlina, N. B. (Moscow); Milkov, L. Ye. (Moscow); Shatalov, N. N. (Moscow);
Ponomareva, N. I. (Moscow)

ORG: Institute of Industrial Hygiene and Occupational Diseases, AMN SSSR (Institut
gigiyenyi truda i profzabolevaniy AMN SSSR)

TITLE: Some clinical data on effects produced by vibrations of different frequencies

SOURCE: Gigiyena truda i professional'nyye zabolevaniya, no. 6, 1966, 6-10

TOPIC TAGS: human physiology, industrial hygiene, vibration biologic effect

ABSTRACT: A total of 115 subjects aged up to 40 was studied to determine the comparative effects of high- and low-frequency vibrations. The first group (38 subjects) was made up of workers with 5 years of service exposed to high-frequency vibrations (500-900 cps; 50 μ (microns)). The second group of 77 subjects with 10 years service was exposed to low-frequency vibrations (12-20 cps; 12-14 mm). The two groups differed in the nature and degree of reactions to vibrations. Low-frequency vibrations affected the sympathetic nervous system and inhibited the cutaneous motor, vestibular, and auditory analyzers. High-frequency vibrations caused the premature development of the angiospastic syndrome in the hand. Vestibular analyzer function and pain sensitivity were altered in this group. In all likelihood, the angiospastic syndrome was caused by the disruption of peripheral autonomic structures.. [CP]

SUB CODE: 06 / SUPM DATE: 28Sep65/ ORIG REF: 005

Card 1/102R

UDC: 617-001.34-02:534.292

ZHUKOVA, A.P., rukovoditel'; POPOV, I.A., rukovoditel'; RYKOVA, Z.L.,
rukovoditel'; ARKHIPOV, N.A., starshiy nauchnyy sotrudnik;
DZHIMSHELYSHVILI, Sh.P., starshiy nauchnyy sotrudnik; DMITRIYEV,
G.V., starshiy nauchnyy sotrudnik; ZHURAVKOV, M.V., starshiy
nauchnyy sotrudnik; ISTOMIN, P.S., starshiy nauchnyy sotrudnik;
KURBATOV, A.K., starshiy nauchnyy sotrudnik; METLINA, T.I.
starshiy nauchnyy sotrudnik; PUGINA, N.I., starshiy nauchnyy
sotrudnik; BOYKOV, M.A., otvetstvennyy red.; BEL'KE, G.V.,
otvetstvennyy red.; KLEYMENOV, P.N., otvetstvennyy red.;
SMOLDYREV, A.Ye., otvetstvennyy red.; SHARAYEV, A.N., otvetstven-
nyy red.; BUTAZOV, V.V., tekhn.red.; SABBITOV, A., tekhn.red.

[Progressive practices and new equipment] Peredovoi opyt i novaya
tekhnika. Moskva, Ugletekhizdat, 1957. 386 p. (MIRA 11:4)

1. Russia (1923- U.S.S.R.) Ministerstvo ugol'noy promyshlennosti.
TSentral'nyy institut tekhnicheskoy informatsii. 2. TSentral'nyy
institut tekhnicheskoy informatsii Ministerstva ugol'noy promyshlen-
nosti SSSR (for Zhukova, Popov, Rykova, Arkhipov, Dzhimshelyshvili,
Dmitriyev, Zhurakov, Istomin Kurbatov, Metlina, Pugina)
(Coal mines and mining)

METLINA, T.I.

Study of fuel and power in the economic districts of the Ukraine.
Dop. AN URSR no.3:417-418 '63. (MGLA 17 10)

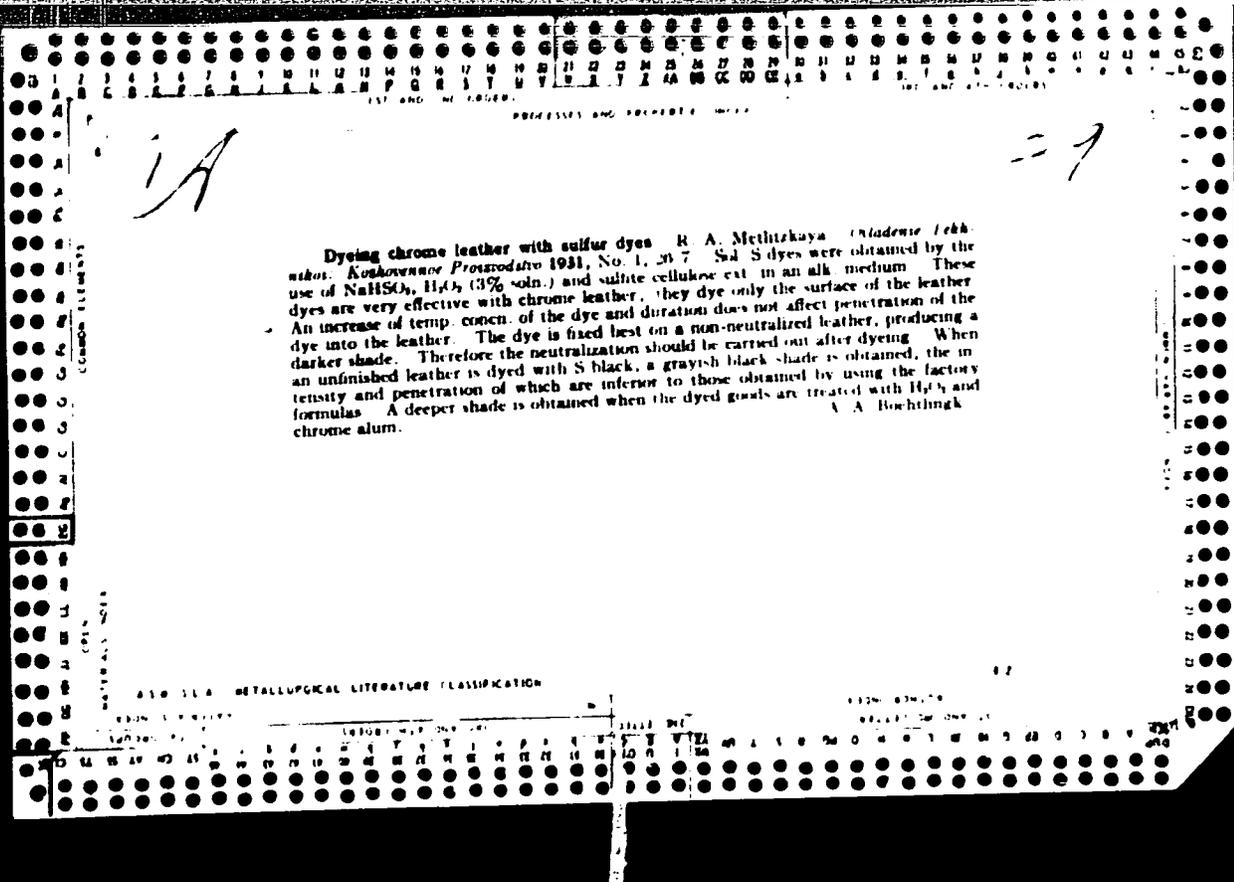
BUKHALO, S.M., doktor ekon. nauk, otv. red.; SHEVCHENKO, Ya.A., doktor ekon.nauk, red.; YAKUSHA, G.B., kand. tekhn. nauk, red.; SKLYAR, V.T., kand. khim. nauk, red.; RESHETNYAK, A.A., inzh., red.; Pilyukhanov, L.S., inzh., red.; METLINA, T.I., inzh., red.; VELIKKHAT'KO, A.T., red.

[Problems of effective use of fuel and power resources (Donets and Dnieper Economic Regions); materials] Voprosy ratsional'nogo ispol'zovaniia toplivno-energeticheskikh resursov (Donetsko-Pridneprovskii ekonomicheskii raion); materialy. Kiev, Naukova dumka, 1964. 200 p. (MIRA 17:12)

1. Nauchno-tehnicheskaya konferentsiya po voprosam ratsional'nogo ispol'zovaniya toplivno-energeticheskikh resursov. Donetsk, 1962. 2. Institut ekonomiki Gosplana Ukr.SSR (for Shevchenko).

MEFLITSKAYA, Anna, frezerovshohitsa Minskogo avtomobil'nogo zavoda;
CHERNYAK, I., redaktor; **KARPINOVICH, Ya.**, tekhnicheskiy redaktor.

[My experience in operating several lathes] Moi opyt mnogostanochnogo obelushivaniia. Minsk, Gos. izd-vo BSSR, Red. nauchno-tekhn. lit-ry, 1951. 19 p. (MLRA 8:2)
(Lathes)



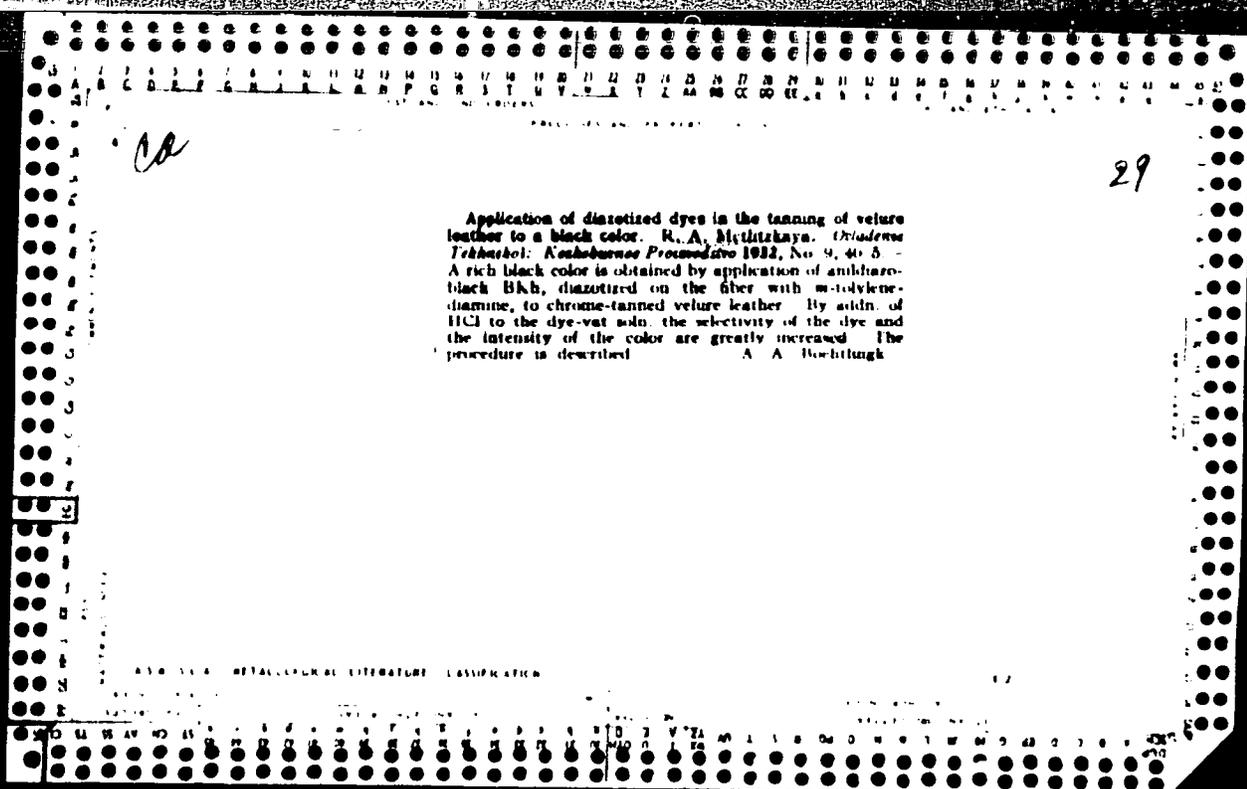
CA

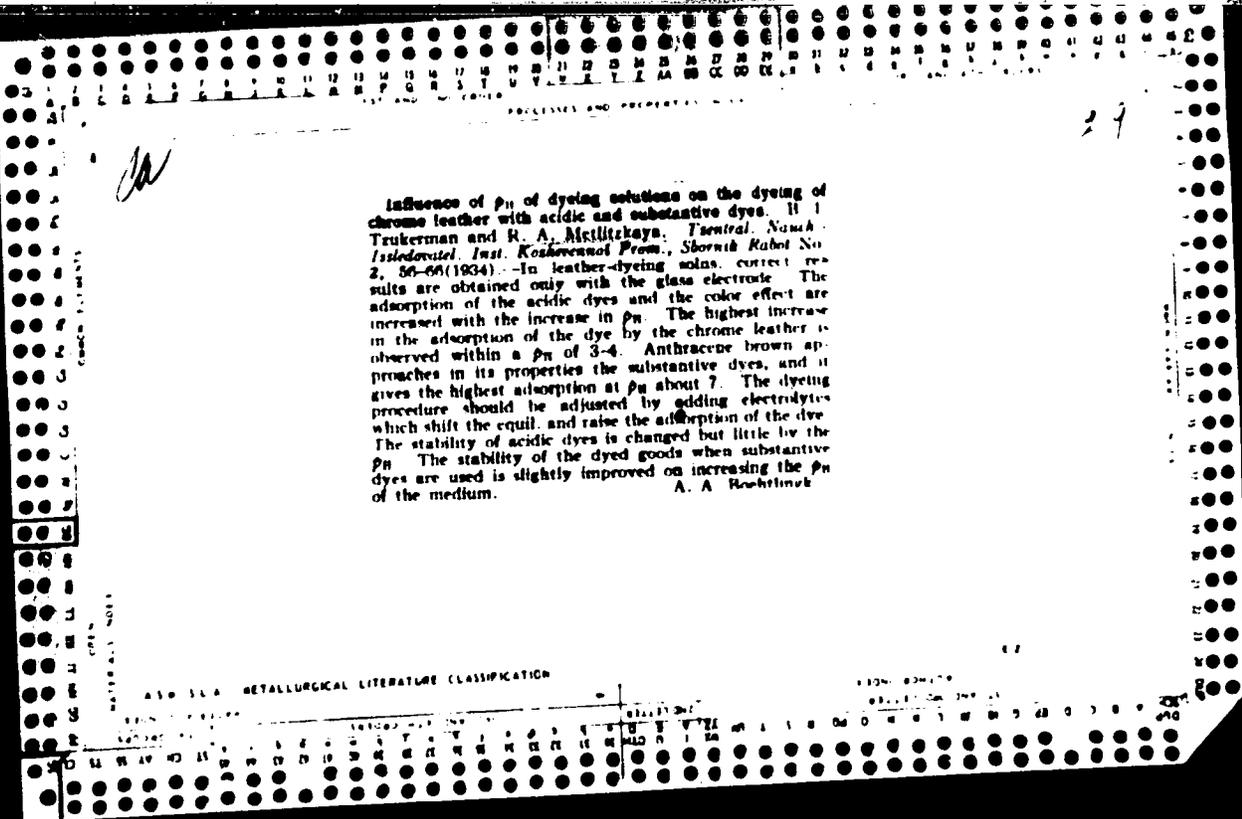
21

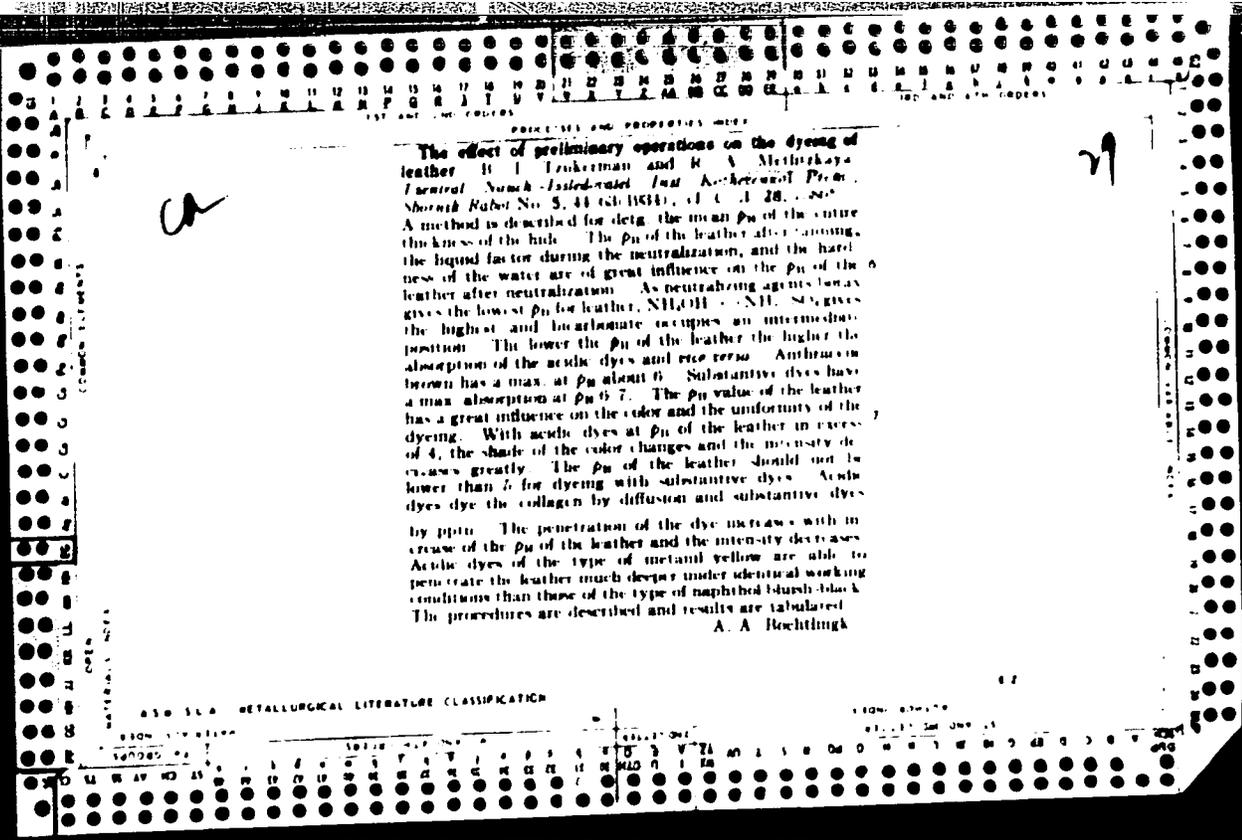
Dyeing light brown leather a brown color resistant toward wet and dry friction. L. Melitskaya. *Izvestiya Vsesoyuzn. Nauch.-Issledovatel. Inst. Kozharskoye Prom.* 1932, No. 2, 25-6.—Three methods were investigated: (1) The leather is dyed in the usual manner in the drum or by brushing with acidant sucrose-brown ATR, followed by treatment with an acidified soln. of NaNO₂ and *m*-tolylene- or *m*-phenylendiamine. The following diazotizing soln. produced the best results: 2 g. NaNO₂, 5 cc. HCl (18°Bé.), one l. water, temp. 15° and duration of treatment 15 min. The treated leather was subjected to a no. of tests (described in detail) and was found to be satisfactory. (2) Mordant dyes do not produce such bright colors, probably on account of the low temp. used in the processing. The following substances were investigated: Chrome brown RO, olive-brown meta-chrome, and some vegetable tanning substances. (3) According to the literature the color of leather dyed with vegetable tanning substances is a function of pH, i. e., the color darkens with an increase of the pH value up to 8-9. The exper. revealed that dyeing with tanning solns. produces colors of less intensity with increase in pH value. The color acquires a higher intensity on treating the leather with K₂TiO₄ salt. A. A. Bochtlingk

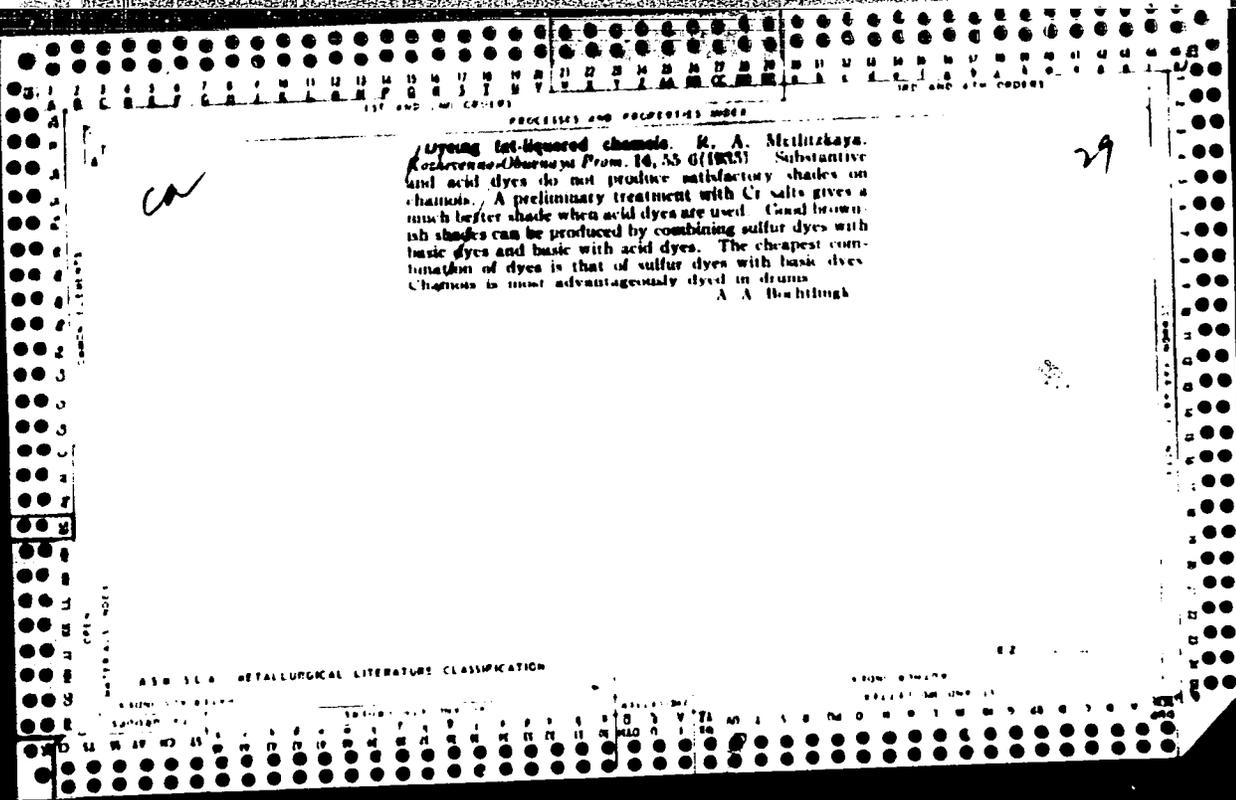
ASD 31A METALLOGICAL LITERATURE CLASSIFICATION

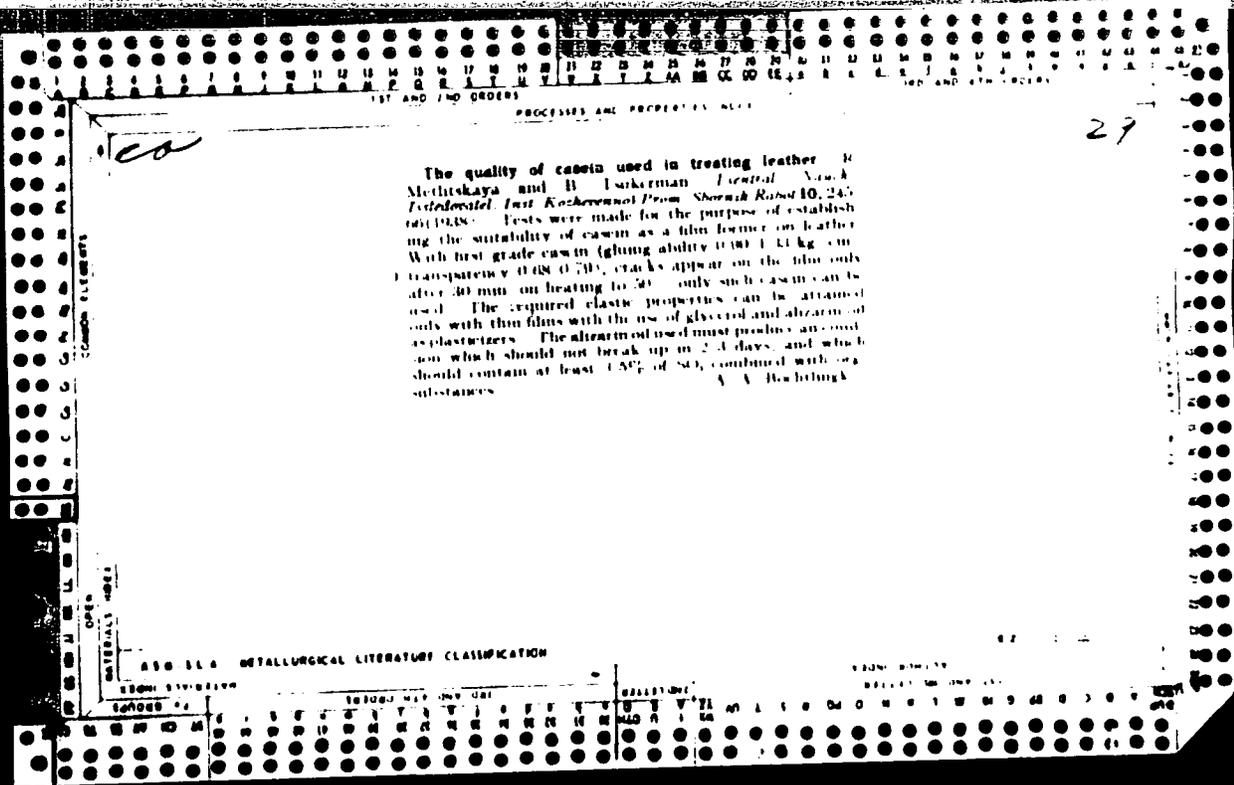
CLASSIFICATION	INDEX	CLASSIFICATION	INDEX
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1	2	1	2
2	3	2	3
3	4	3	4
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5	6	5	6
6	7	6	7
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8	9	8	9
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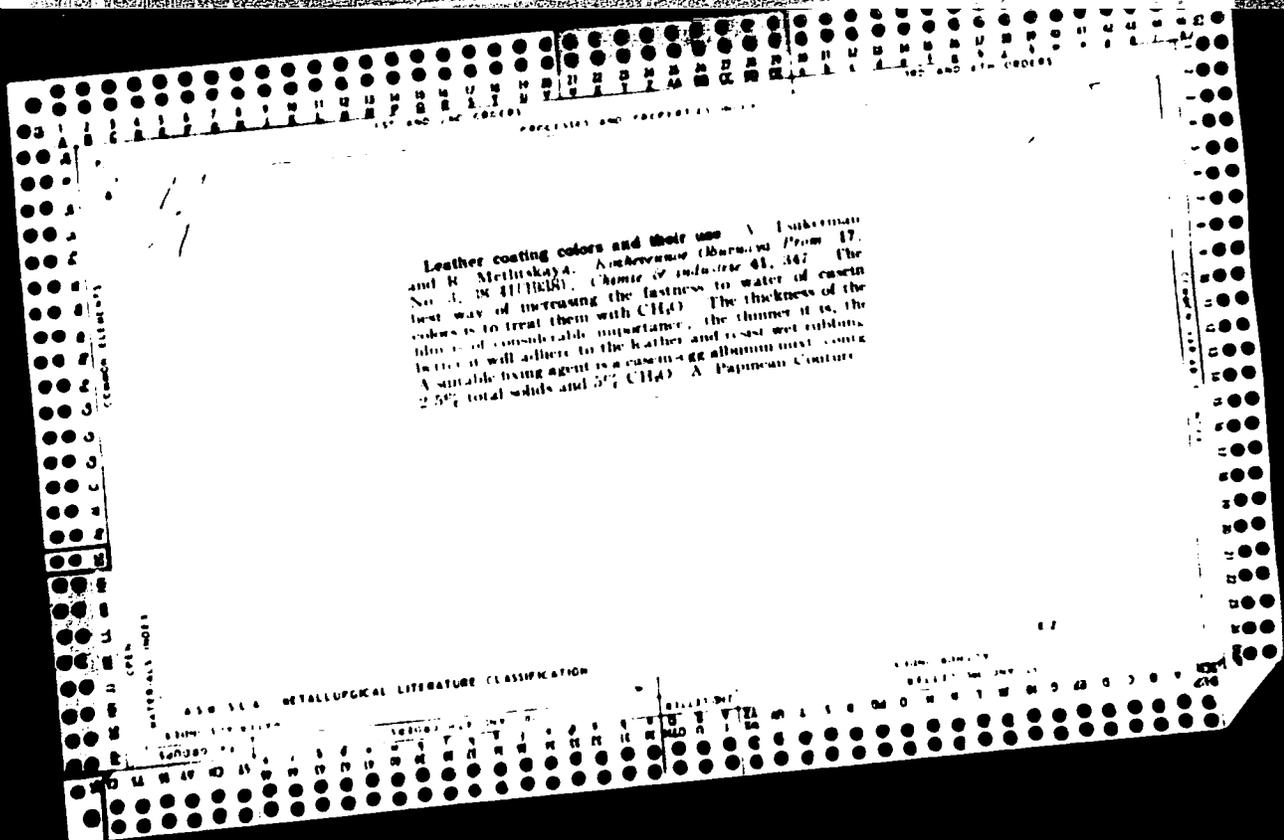












METLITSKAYA, R. A.

Dyes and Dyeing

Dyes for leather. Leg. pron., 12, No. 4, 1952.

Monthly List of Russian Acquisitions, Library of Congress, October 1952. Unpublished.

Meilitzkaya, R. A.

USSR

Properties of the various components of aqueous finishes.
 R. A. Meilitzkaya. Nauch.-Issledovatel. Study Travel.
 (Nauch.-Issledovatel. Inst. Kozhenn.-Obuvnoi Prom. 1953,
 No. 21, 38-38; Referat. Zhur., Khim. 1954, No. 40607.)

The finish of leather is adjusted to the requirement of the type of leather and the nature of its surface. Leathers having a dense surface wet poorly and do not absorb dyes while leather with an open surface absorb them strongly. Gelatin and casein increase the adhesion of the film to leather; in addn. gelatin improves its elasticity. Egg albumin increases the sheen and water resistance of the film and, of all the protein substances, it imparts the smallest water-wetting properties to the film. A neg. characteristic of egg albumin is its poor wettability in relation to leather and the brittleness of its film. Blood albumin behaves analogously to egg albumin but its effect is weaker. Blood albumin deepens the hue and increases sheen and water resistance but hastens aging of the film. Shellac, as far as water resistance and sheen are concerned, is similar to high-grade casein. It has higher wetting properties than casein but its film is more brittle and not as adhesive. Wax emulsion reduces somewhat the sheen, making it softer and gentler, increases the hydrophobic properties of the film, and makes the face of the leather smooth and agreeable to touch. This applies only to wax emulsions of colloidal dispersions. A deflection of flax seed reduces the absorbability of dye which is particularly telling on leathers having a loose and open surface. Compns. for leather finishes of open and tight surfaces are given. M. Hersh

METLITSKAYA, R. A.

3

✓ Improving the quality of wax emulsions. R. A. Metlitskaya and A. L. Zaldes. *Leghaya Prom.* 14, No. 8, 27-28 (1954). Bituminous admixts. in montan wax hinder the prepn. of uniform, high-quality emulsions. Admixts. should be removed and emulsion should be homogenized. Carnauba wax contg. a small amt. of bituminous admixts. formed a uniform emulsion. B. Z. Karich

METLITSKAYA, R.A., kandidat tekhnicheskikh nauk; ZAYDES, A.L., kandidat
~~khimicheskikh nauk.~~

Pigments in leather coating dyes. Leg.prom.15 no.1:31-34 Ja '55.
(Dyes and dyeing--Leather) (MLRA 8:3)

MEFLITSKAYA, B.A., kandidat tekhnicheskikh nauk.

Reducing brittleness and the hydrophilic nature of casein coatings.
Leg.prom.16 no.2:28-31 F '56. (MLBA 9:7)
(Casein) (Dyes and dyeing--Leather)

ME TLITSKAYA
ZAYDES, A.L.; METLITSKAYA, R.A.

Mineral pigments used in dyes for covering leather. Zhur. prikl.
khim. 30 no.11:1633-1641 # 157. (MIRA 11:2)
(Pigments) (Dyes and dyeing--Leather)

KULAYEV, I.S., FAIS, D., METLITSKAYA, A.Z.; KRASHENINNIKOV, I.A.

Short-lived inclusion of P³² into the mycelium of *Pent-*
cillium chrysogenum. Dokl. AN SSSR 159 no.1:198-201, N 194.
UMIA 17:12.

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
Predstavleno akademikom A.N. Belozerskim.

LUNDINA, M.G., kand.tekhn.nauk; Prinsipali uchastiye: LOSHLYAK, L.L., mladshiy nauchnyy sotrudnik; YERMOLAYEVA, A.I., mladskiy nauchnyy sotrudnik; SAFRONOVA, Z.A., mladskiy nauchnyy sotrudnik; RAUKHMAN, B.R., inzh.; MEFLITSKAYA, S.S.; SHISHKONOVA, L.I.; MURAV'YEVA, L.V.

Investigating the processing of clay in making bricks. Trudy NII Stroikeramiki no. 14:3-35 '59. (NIRA 14:1)

1. Obshchesoyuznyy nauchno-issledovatel'skiy institut stroitel'noy keramiki (for Koshlyak, Yermolayeva, Safronova).
2. Nachal'nik laboratorii Vorontsovskogo kirpichnogo zavoda (for Shishkanova).
3. Nachal'nik laboratorii Nishue-Kotel'skogo kirpichnogo zavoda (for Shishkanova).
4. Nachal'nik laboratorii Moskovskogo eksperimental'nogo zavoda (for Murav'yeva).
(Clay)

MEGLITSKAYA, Z. A.

PA 41/49776

USSR/Medicine - Typhus
Medicine - Vaccine Therapy
Mar/Apr 49

"Particulars of the Course of Abdominal Typhus in Vaccinated Children," Z. A. Mehlitskaya, E. N. Perel'man, Children's Propaedeutic Clinic, Second Moscow Med Inst imeni I. V. Stalin, Children's Clinical Hosp, 4 pp

"Pediatriya" No 2

Preventive inoculations for abdominal typhus do not fully guarantee immunity from the disease, but shift the clinical picture to the favorable side. In inoculated children, abdominal typhus

41/49776

USSR/Medicine - Typhus (Contd)
Mar/Apr 49

is distinguished by larger number of mild forms (51.6%) and a shorter duration. It occurs in severe form in comparatively few cases (8%).

LC
41/49776

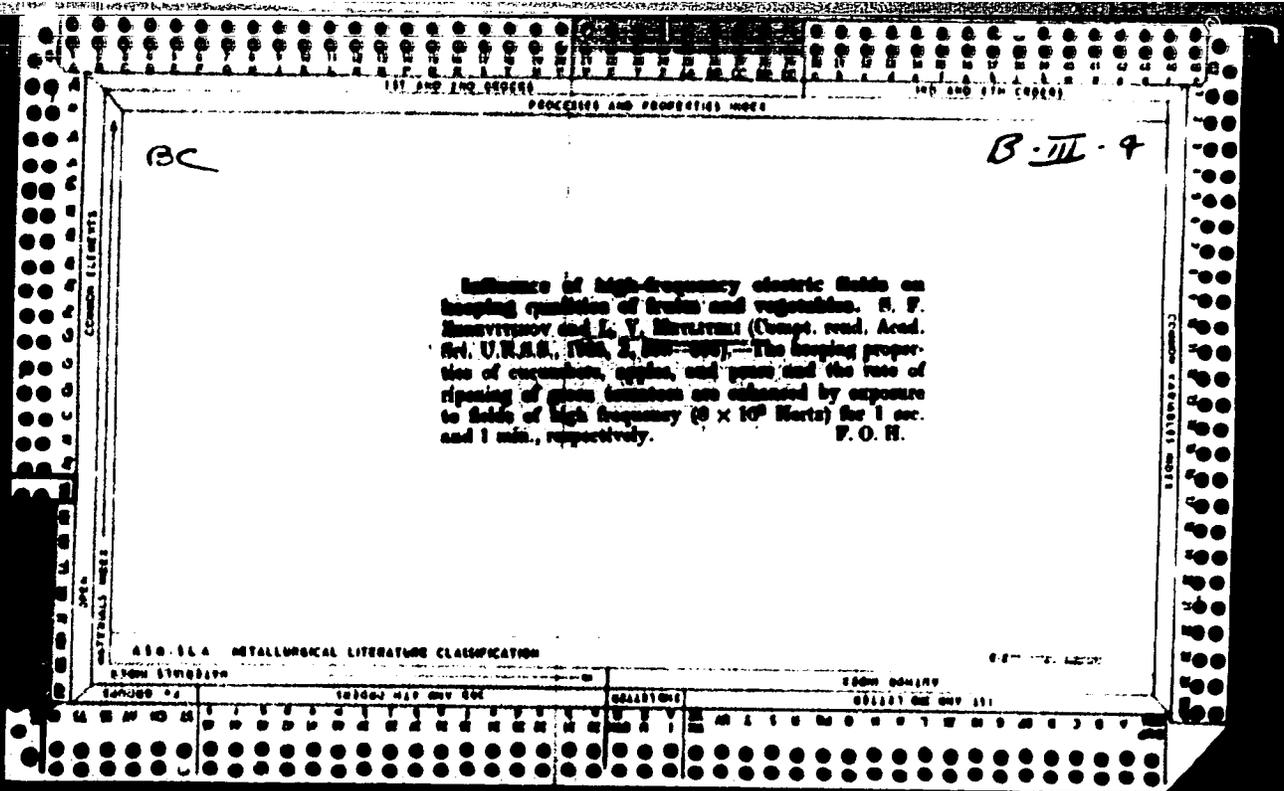
SILYUKOV, G.D., insh.; METLITSKIY, B.V., insh.

Designing compressed-air braking systems for marine engines.
Sudstroenie 24 no.7:34-38 J1 '58. (MIRA 11:9)
(Marine engines) (Air brakes)

METLITSKIY, L. O., RUBIN, B. A. (USSR).

"Biochemical Basis of the Use of γ -Rays to Extend the
Storage of Potatoes."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 August 1961



PROCESSES AND PROPERTIES

Det

Losses of citrus fruit during storage — S. F. Terevitskov and I. V. Metlitskii. *Sov. Zh. Prikl. Biol.* 1936, No. 9, 82-84 (*China & Ind. 37*, 1936). Deterioration of citrus fruit during storage is due chiefly to a *Penicillium*. Another cause of physiological, but nonparasitical, deterioration is a disturbance of the mechanism of the oxidation taking place during storage. The loss of sugars is considerable, but the total solids content is unchanged, showing that the oxidation of the sugars does not proceed as far as CO₂ and H₂O as in normal breathing. There must therefore be formed substances which accumulate in the fruit, particularly acids which affect the cells. The reason for this abnormal respiration seems to be the temp. adopted for storage (0-1° at 3°). The "physiological" deterioration does not take place with lemons and mandarins.

V. Dapineau Courtes

ABO 314 METALLURGICAL LITERATURE CLASSIFICATION

AM

МЕТЛАНУ (L. V.) & СОБОЛЕВА (Мно V. P.). Научение летального действия электрического поля высокой частоты на культуру грибов *Sclerotinia libertiana* и *Botrytis cinerea*. (Предварительное сообщение.) (Studies of the lethal action of the electrical high frequency field on cultures of *Sclerotinia libertiana* and *Botrytis cinerea*. (Preliminary report.))—*Pl. Prot. Leningr.*, 1936, 10, pp. 32-36, 1936. [English summary.]

In the authors' experiments pure cultures of *Sclerotinia libertiana* (*S. sclerotiorum*) and *Botrytis cinerea* were killed after 20 seconds' exposure to a high-frequency current under the following technical conditions: filament tension 11 volta, anode tension 2,000 volta, current in the secondary circuit 10 amp., wave-length 5-6 m., diameter of the secondary circuit plate 12 cm. In carrot roots inoculated with *S. sclerotiorum* and subjected to the same irradiation, for periods up to 3 minutes, the fungus was still alive two or three days later.

A 10-11 A METALLURGICAL LITERATURE CLASSIFICATION

CA

110

The problem of increasing the content of dry matter in tomato. U. A. Rubin and L. A. Melitskil. *Russkoye Pismo v Krasnodar, Sbornik* No. 1, 85-112 (1940). The increase of the dry matter content of the tomato has not been solved as yet by purely biol. methods of selection, but some intermediate degree of progress is reported. The plants respond very well in this respect to adequate N, P, and K fertilization and increases of almost 100% have been achieved by high order of fertilization during planting and again during flowering. Direct seeding of the open exptl. field gives products with higher solid content than does the transplantation method of the plants grown in small cultures, in the early stages. Use of plant growth regulators like 2,4-dichlorophenoxyacetic acid also aids the increase of dry matter, with changes up to 20% being found in some cases. G. M. Kosolajoff.

12

CA

Content of vitamin C in citrus fruit as an index of their stability on storage. L. V. Melnikskii and V. M. Tok-humskaya. *Doklady Akad. Nauk S.S.S.R.* 60, 650-61 (1949). - In stored fruit, like tangerines, lemons, and oranges, the respiratory gas exchange involves only the ascorbic acid that exists in the skin of the fruit, and the ascorbic acid in the body of the fruit acts as a reserve and is essentially unattacked. The peroxidase activity and the utilization of sugar stores is also restricted largely to the flavedo, with smaller indices in the albedo and very low values in the fruit proper. The peroxidase activity roughly parallels the ascorbic acid content in the various tissues, max. occurring in the flavedo. The spoilage indicated by brown spots results from reduction of oxidative activity and enhancement of anaerobic reactions. Generally, the higher the ascorbic acid level, the more resistant is the fruit to spoilage in storage. (C. M. Kozulapoff)

1951

METLITSKIY, L.V.; TSEKHOMSKAYA, V.M.

Qualitative changes in respiratory gas exchange of citrus fruit in relation to storage temperature. Doklady Akad. Nauk S.S.S.R. 89, 1115-17 '53. (MLRA 6:4)
(CA 47 no.19:10147 '53)

NETLITSKIY, L.V.

Certain biological problems in the storage of fruit. Izv. AN SSSR Ser.
biol. no.1:83-94 Ja-F, 1954 (MLRA 7:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy promysh-
lennosti. (Fruit--Storage)

METLITSKIY, L.V.

Peculiarities of chemical composition of citrus fruit of Georgian S.S.R. L. V. Metlitski and V. M. Tsekhomskaya. *Biokhim. Plodov i Ooshchei, Akad. Nauk S.S.R., Inst. Biokhim., Sbornik 3, 163-75(1955).*—The average values of the content of water, fructose, glucose, sucrose, pectins, cellulose, acids, essential oils, mineral substances, and vitamins A, B₁, B₂, C, and PP, are given for the flesh, skin and whole fruit of tangerines, oranges, and lemons common to Georgian S.S.R. It is pointed out that the vitamin C content varies greatly in storage, being retained more satisfactorily in the skins of the fruit rather than in the fleshy parts. G. M. Kosolapoff

All-Union Sci. Res. Inst. Conservation of Vegetables Industry
 Min. Food Products USSR

METLITSKIY, L.V., doktor sel'skokhozyaystvennykh nauk; TSEKHOMSKAYA, V.M.,
kandidat sel'skokhozyaystvennykh nauk; RUBIN, B.A., professor,
spetsredaktor; PRITYKINA, L.A. redaktor; GOTLIB, E.M., tekhnicheskiy redaktor.

[Picking and storing apples] Uborka i khranenie yablok, Moskva,
Pishchepromizdat, 1956. 125 p. (MLRA 10:6)
(Apple)

MERLITSKIY, L.V.

PUGACHEV, I.A., glavnyy red.; ANDRUSEVICH, D.A., red.; ARKHANGEL'SKIY, M.A., red.; BERKZIN, N.T., red.; VINOGRADOV, A.P., red.; GERASIMOV, M.A., red.; KLASSEN, N.A., red.; LIFSHITS, M.O., red.; MANERBERGER, A.A., red.; ~~MERLITSKIY, L.V.~~, red.; POPOV, V.I., red.; SMIRNOV, V.S., red.; STROGOV, N.I., red.; SHAUMYAN, L.S., red.

[Dictionary of commercial products] Tovarnyi slovar'. Glav. red. I.A.Pugachev. Chleny glav.red. D.A.Andrusevich i dr. Moskva, Gos. izd-vo torg. lit-ry. Vol. 3. Iglu ryba - kombikorma. 1957. (MIRA 11:4)
998 p.

(Commercial products--Dictionaries)

NETLITSKIY, L.V.

Methods of drying fruit and vegetables in the Bulgarian People's
Republic. Kons. 1 ov. prom. 12 no.3:20-22 Mr '57. (MIRA 10:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i
ovoshchesushil'noy promyshlennosti.

(Bulgaria--Vegetables--Evaporation)

(Bulgaria--Fruit--Evaporation)

METLITSKIY L. V.
RUBIN, B. A. and METLITSKIY, L. V.

"Application of Ionizing Radiations to Regulating Potato and Vegetable Pest
and All-Year-Round Storage."

paper to be presented at the 2nd ~~AI~~ UN Intl. Conf. on the peaceful uses of Atomic
Energy, Geneva, 1 - 13 Sept 58.

RU SR M
ESTIMATED PLANTS General Problems.
No. 1586
Merkusky, G.V.
Fruit and Vegetation Cultivation in the
Socialist Countries.
Transfer m. 1 ovoshchessn. prom-st', 1958,
no. 4, 40-43
no abstract

1/1

METLITSKIY, L.V.; TSEKHOMSKAYA, V.M.

Functional disorders in apples during storage and measures for
their control. Biokhim. pl. i ovoshch. no.4:42-58 '58.
(MIRA 11:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i ovoshche-
sushil'noy promyshlennosti Gosplana RSFSR.
(Apple--Storage)

METLITSKIY, L.V.

26-58-7-21/48

AUTHORS: Rubin, B.A., Professor, Metlitskiy, L.V., Karasnonev, V.G.

TITLE: The Use of Gamma Rays in Long-Period Storage of Potatoes
(Ispol'zovaniye gamma-luchey pri dlitel'nom khraneni kartofofelya)

PERIODICAL: Priroda, 1958, Nr 7, pp 91-94 (USSR)

ABSTRACT: Large amounts of potatoes stored over a long period of time at temperatures above 5°C are subject to fast rotting, while at temperatures below 5°C they soon acquire a sweetish taste, take a longer time until they are sufficiently cooked and are inclined to get black spots when being cooked. Dusting with 3.5% of methyl ether of alpha-naphthyl acetic acid preserves the bulbs over an extended period of time but makes them an easier prey to the attacks of microorganisms. X-ray doses of 10,000 to 16,000 r applied to the potatoes at normal temperatures kept them fresh for 8 months. By their physical nature and biological effect, gamma rays are close to X-rays, but can be used easier under normal conditions. Their application for potato storage purposes, however, remains in the experimental stage, since the changes occurring in the potato tissues have not been studied sufficient-

Card 1/5

26-58-7-21/48

The Use of Gamma Rays in Long-Period Storage of Potatoes

ly . This was done by the authors of the article together with Ye.T. Mukhina, Ye.T. Sal'nikova, N.P. Korableva, A.V. Mikheyeva and N.P. Morozova, in order to find the best factors for gamma radiation application. It was found out that the meristematic tissues stay alive at a radiation dose of up to 50,000 r, while they undergo changes at 10,000 r, such as a reduction of nucleic acids by 10% which increases to 25% within 2 months. Doses of 100,000 r killed the *Phytophthora infestans* fungus. The Institut pitaniya AMN SSSR (The USSR Academy of Medical Sciences' Food Institute) has for several years conducted experiments with animals that were fed with potatoes radiated with doses of up to 40,000 r. No negative results were observed. The vitamin C content is reduced, decreasing immediately upon the radiation but increasing again with time, and attaining the normal level in spring. A dose of 10,000 r gave the best results for a period of 300 days, 10% losses as compared with 30% in untreated potatoes. The authors suggest a mobile irradiation station of a simple construction principle sufficient for the radiation of 25 to 50,000 tons of potatoes.

Card 2/3

26-58-7-21/48

The Use of Gamma Rays in Long-Period Storage of Potatoes

There is 1 photo and 1 figure.

ASSOCIATION: Institut biokhimii imeni A.N. Bakha AN SSSR - Moskva (Institute of Biochemistry imeni A.N. Bakn of the AS USSR - Moscow)

1. Potatoes--Storage 2. Gamma rays--Applications

Card 3/3